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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,532	10/12/2006	Marie-Claire Grosjean-Cournoyer	P/4976-38	9561
2352 7590 08/24/2009 OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			EXAMINER PIHONAK, SARAH	
			ART UNIT 1617	PAPER NUMBER
			MAIL DATE 08/24/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/588,532	<b>Applicant(s)</b> GROSJEAN-COURNOYER ET AL.	
	<b>Examiner</b> SARAH PIHONAK	<b>Art Unit</b> 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 9-19 is/are pending in the application.
- 4a) Of the above claim(s) 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-17 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This application is a 371 (national stage application) of PCT/EP05/02566, filed on 2/10/2005.

#### ***Priority***

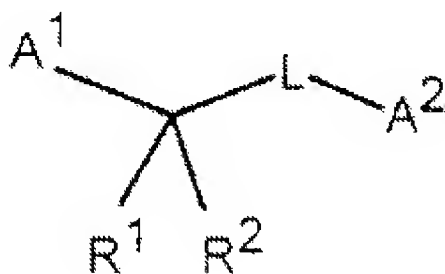
This application, filed on 10/12/2006, claims foreign priority to Application No. 04356017.6, filed on 2/12/2004, and claims priority to Provisional Application No. 60/636898, filed on 12/17/2004.

#### ***Response to Arguments***

1. In the office action dated 3/6/2009, claims 1-2, 4-9, and 16-17 were rejected for nonstatutory obviousness-type double patenting, over claims 1-2, 4-9, and 18-19 of co-pending Application No. 10/587802, in view of Leroux, Pest. Sci., 47, pp. 191-197. In response, the Applicants filed a terminal disclaimer under 37 CFR § 1.321(c) on 6/1/2009. However, the terminal disclaimer has been disapproved, as the attorney present on the disclaimer is not an attorney of record. Therefore, the rejection of the instant claims for non-statutory obviousness type double patenting is maintained, for reasons of record. In the reply filed on 6/1/2009, claims 1-8 were cancelled, and new claim 19 was added. Claim 18 had been withdrawn from consideration in the office action dated 3/6/2009, as it is directed to a non-elected invention. In consideration of the amended claim set, a modified rejection of the instant claims for non-statutory obviousness type double patenting is applied, which will be discussed in detail further in this office action.

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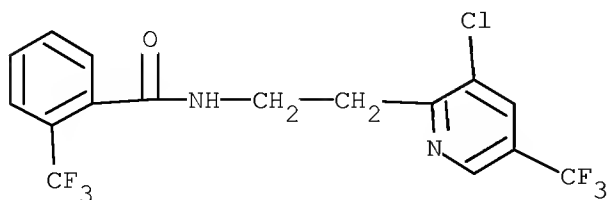
In the office action dated 3/6/2009, claims 1-2, and 4-17 were rejected under 35 USC § 103(a) as being unpatentable over Cooke et. al., WO 2001/11965, in view of Holah et. al., WO 2002/069712, and further in view of Colby, Weeds, 15, pp. 20-22. In the response filed on 6/1/2009, the Applicants argued that Cooke et. al. discloses numerous pyridylethylbenzamide derivatives, but does not specifically teach the elected species, N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide. Cooke et. al. teaches pyridinylethyl benzamide compounds of formula (I), shown below:



(I)

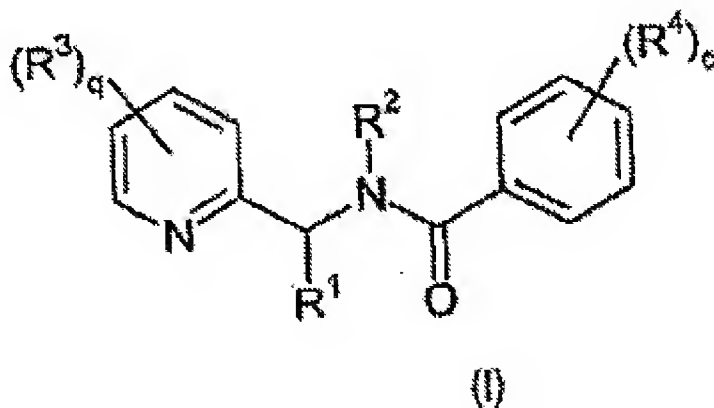
Where A<sup>1</sup>=2-pyridyl, which is substituted up to 4 groups, at least one of which is haloalkyl, etc.; R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>=R<sup>b</sup>, etc.; R<sup>b</sup>= H, etc.; L=-CH(R<sup>3</sup>)N(R<sup>5</sup>)C(=X)-, etc.; X=O, etc.; A<sup>2</sup>=carbocyclyl, which is substituted, etc. The structure of N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide is shown below:

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The compound N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide is a species of formula (I), taught by Cooke et. al. Therefore, while it is acknowledged that Cooke et. al. does not explicitly show examples of this particular species, the species itself is included in the compounds taught by Cooke et. al.

The Applicants have argued that Holah et. al. teaches different fungicidal compounds in combination with agents which inhibit fungal spore germination or mycelium growth. In response, it is noted that Holah et. al. teaches pyridylmethyl benzamide compounds of formula (I), shown below:



Where  $R^3$ =halogen, etc.;  $R^1$ =H, etc.;  $R^2$ =H, etc.;  $R^4$ =halogen, etc.;  $q=0-4$ ;  $c=0-5$ .

While Holah et. al. does not teach the species N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide, Holah et. al. teaches compounds which have a very similar core structure and functional groups with the elected

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species. The fungicidal compounds taught by Holah et. al. differ from the instantly claimed compound in that there is a methyl group between the pyridine ring and the benzamide moiety; in the elected species, this is replaced by an ethyl group. Therefore, the elected compound, N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide and the compounds taught by Holah et. al. are homologues of each other. Homologues are compounds which share a common core structure and functional groups but which differ by a  $-CH_2-$  moiety. Homologous compounds are expected to have similar biological activity, absent unexpected results. Additionally, Holah et. al. teaches combination of the homologous pyridinylmethyl benzamide compounds with fungicidal agents that inhibit spore germination or mycelium growth, such as iprodione. As the elected compound, N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide, and the homologous compounds taught by Holah et. al. are both fungicidal agents, and Holah et. al. teaches combination with compounds which inhibit fungal spore germination or mycelium growth, it would have been prima facie obvious for one of ordinary skill in the art to combine the elected compound, N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide, with the additional agents that inhibit fungal spore germination. As both N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide and the pyridylmethylbenzamide homologues taught by Holah et. al. act as fungicides, one of ordinary skill in the art would have expected success in combining N-{2-[3-chloro-5-(trifluoromethyl)-2-

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pyridinyl]ethyl}-2-trifluoromethylbenzamide with agents which inhibit fungal spore germination, as the compounds possess the same utility, as fungicides.

In the office action dated 3/17/2009, the reference of Colby was also applied to the rejection, as Colby teaches a method for calculating synergistic combinations of compounds for herbicides. The Applicants' have argued that while Colby teaches a method of determining if synergism is present, the method is not used to create synergistic combinations. The Applicants have also presented results in the specification which show a synergistic combination when the elected species, N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide, is combined with agents which inhibit fungal spore germination or mycelium growth, within the claimed ratio range. These results are found persuasive, and provide evidence of unexpected synergism over the prior art. Therefore, as the specification provides evidence for unexpected synergy between combinations of N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide and agents which inhibit fungal spore germination or mycelium growth, the rejection of the instant claims under 35 USC § 103(a) is withdrawn. In the reply filed on 6/1/2009, the Applicants submitted an amended claim set. Claims 9-17 and 19 are found to be free of the prior art in view of the results in the specification which demonstrate unexpected synergy. However, the rejection of claims 9-17 and 19 is maintained for non-statutory obviousness type double patenting over claims of co-pending Application No. 10/587802. Accordingly, this action is made **FINAL**.

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It is also noted that claim 19 contains the terms “as to the N-oxides of 2-pyridine thereof”. However, in the specification, there are no examples of these N-oxide compounds, and it is not certain what is meant by referring to “N-oxides of 2-pyridine thereof”. Due to this limitation of this new claim, a new rejection under 35 USC § 112, second paragraph is applied, which will be discussed in detail further in this office action.

2. Claims 9-19 are pending.
3. Claim 18 was previously withdrawn.
4. Claims 9-17 and 19 are rejected.

***Claim Rejections-Nonstatutory Obviousness Type Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).



6. Claims 9-17 and 19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 9-19 and 21 of copending Application No. 10/587802 in view of Leroux, *Pest Management Science*, **47**, pp. 191-197.

This is a provisional obviousness-type double patenting rejection.

7. The instant claims are directed to a composition comprised of the elected compound (a), N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide, and an additional compound (b) which inhibits fungal spore germination or mycelium growth, in a weight ratio of (a)/(b) from 0.01 to 20. The instant claims are also directed to an additional fungicidal compound (c).

The co-pending claims are directed to a fungicidal composition comprised of compound (a), N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide, and an additional compound (b) which inhibits electron transport in cellular respiration of fungi. The co-pending claims are also directed to an additional fungicide compound (c). While the (b) components of the instant claims and the co-pending claims act on different metabolic pathways of fungi, both sets of claims include an additional component (c). It is also taught by Leroux that many fungicidal agents have multiple mechanisms of action; in particular, it is taught that iprodione, in addition to inhibiting mycelium growth, also inhibits electron transport (p. 193, right column, third full paragraph). Therefore, as both claim sets are drawn to compositions comprised of N-{2-[3-chloro-5-(trifluoromethyl)-2-pyridinyl]ethyl}-2-trifluoromethylbenzamide and

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compounds which inhibit electron transport and inhibit mycelium growth or spore germination, the claims are not patentably distinct from each other. Additionally, the claims use comprising language, and do not exclude the presence of additional types of anti-fungal agents.

***Claim Rejections-35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 9-17, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 19 cites the limitation "as to the N-oxides of 2-pyridine thereof". However, it is not certain what is meant by this limitation, as the specification does not provide examples of N-oxides of pyridylethylbenzamide compounds. Therefore, the claim limitation is not understood. Clarification is respectfully requested. Claims 9-17, which are dependent claims of claim 19, are also rejected for this reason.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH PIHONAK whose telephone number is (571)270-7710. The examiner can normally be reached on Monday-Thursday 8:00 AM - 6:30 PM EST, with Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on (571)272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S.P.

/SREENI PADMANABHAN/

Supervisory Patent Examiner, Art Unit 1617